

**Fresnel lens and projection display device using one  
such lens**

**Abstract**

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A Fresnel lens comprises at least one first prism (28)  
and one second prism (34). Each prism has a first side  
(30, 36) and a second side (32, 38) which forms with a  
main axis (AA') an angle greater than that formed by  
10 the first side (30, 36) and the main axis (AA').  
Conventionally, the second side (32) of the first prism  
(28) collimates the light received (R1) from a light  
source in line with the main axis (AA'). In order to  
improve the optical effectiveness, the second side (38)  
15 of the second prism (34) transmits the light received  
(R2) from the source in a first direction (R2')  
slightly different from the main axis (AA').

Figure 3